Dec. 11, 1951 A. SHACIKOSKI 2,577,924

MINE ROOF SCALER

Filed May 2, 1949

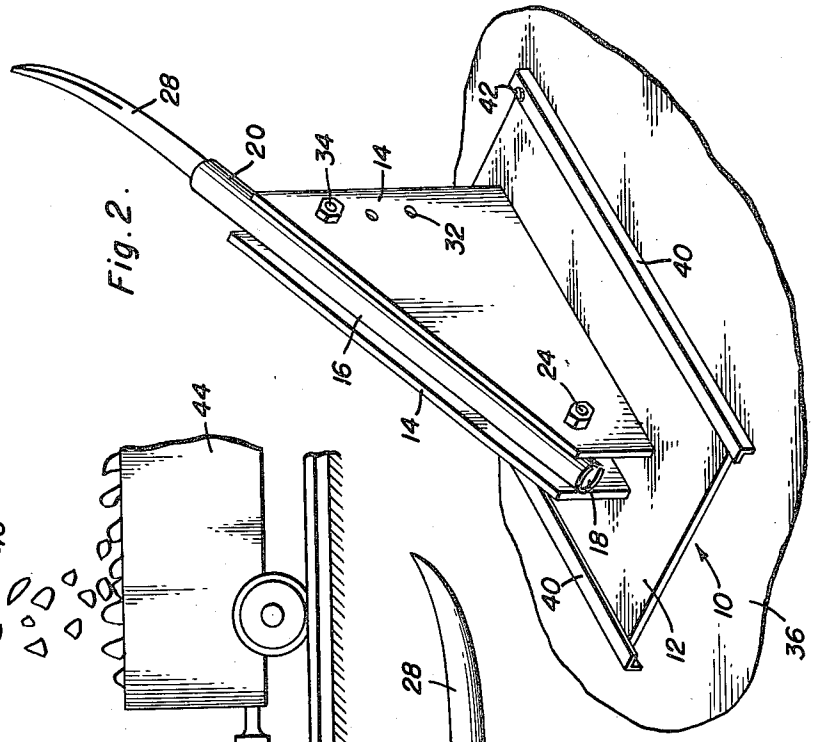


Fig. 2.

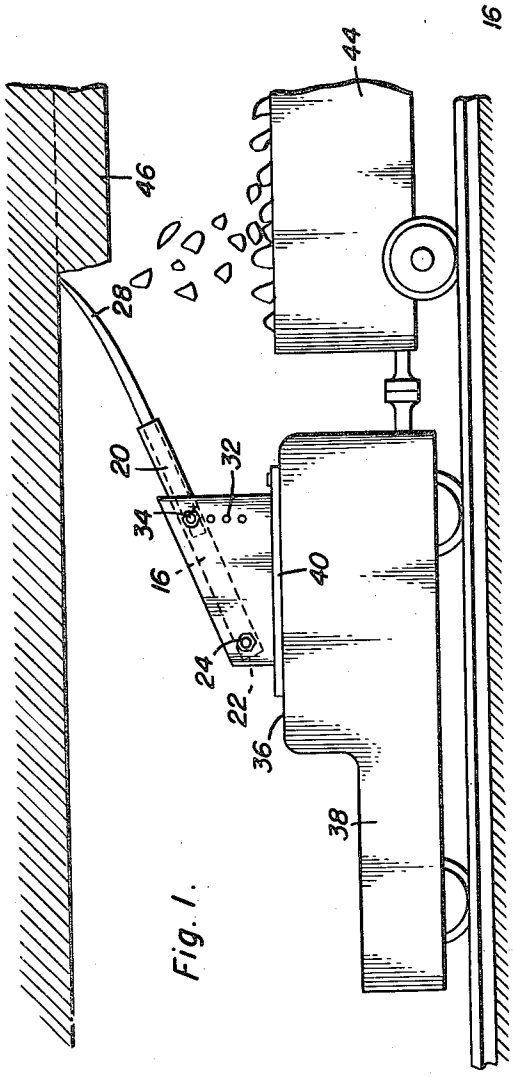


Fig. 1.

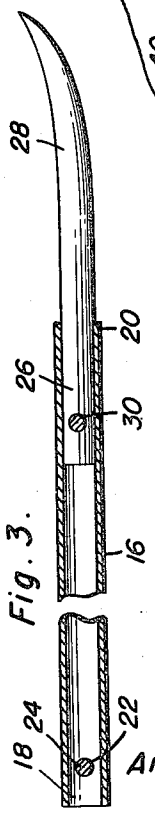


Fig. 3.

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Patented Dec. 11, 1951 2,577,924

UNITED STATES PATENT OFFICE

2,577,924

MINE ROOF SCALER

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Application May 2, 1949, Serial No. 90,884

2 Claims. (Cl. 262—1)

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This invention relates to new and useful improvements in equipment for mine cars and the primary object of the present invention is to provide an attachment for a mine car that will scale loose rock from a mine roof as the mine car is moving.

Another object of the present invention is to provide a mine roof scaling attachment for mine cars that will eliminate the necessity of having to employ operators using pick and slate bars.

Yet, another object of the present invention is the provision of a mine roof scaler that will permit slate and bone to be removed from the roof of a mine in a safe and convenient manner without having to employ explosives.

Another very important object of the present invention is to provide a mine car attachment that will permit loose rock on the roof of a mine to be scaled without the risk of placing operators beneath a weakened roof.

A further object of the present invention is to provide a mine roof scaler that is mounted on one car and disposed over a second car so that as the cars move forwardly slate or bone removed by the scaler will fall into the second car thereby eliminating the necessity of having diggers or workmen for loading mine cars with scale or bone.

A still further aim of the present invention is to provide a mine roof scaler that is simple and practical in construction, strong and reliable in use, small and compact in structure, relatively inexpensive to manufacture, that is quickly and readily applied to or removed from a mine car, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a side elevational view of the present invention applied to a mine car and showing the present invention in use for scaling a mine roof;

Figure 2 is a perspective view of the present invention applied to a mine car (shown in part); and

Figure 3 is a fragmentary longitudinal vertical sectional view of the present holder and showing the blade, in elevation, applied thereto.

Referring now to the drawings in details, wherein for the purpose of illustration, there is disclosed a preferred embodiment of the present invention, the numeral 10 represents a base member generally, including a substantially rectangular plate 12 and a pair of spaced walls or supports 14 that are fixed to and which rise from the plate 12.

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An elongated holder or tubular member 16 is associated with the base member 10 and includes first and second end portions 18 and 20. The end portion 18 is transversely apertured, as at 22, and registers with suitable apertures provided in the walls 14. The aperture 22 and the apertures in the walls 14 in registry with the aperture 22 receive a bolt and nut 24 for pivotally securing the holder 16 to the walls 14.

The end portion 20 receives the shank portion 26 of an arcuate blade or scraper 28 and the shank portion 26 is apertured, as at 30, to register with suitable openings in diametrically opposite sides of the end portion 20.

A plurality of vertically spaced openings 32 are provided in each of the walls 14 and are disposed on an arc to selectively register with the aperture 30 in a shank portion 26 and the openings in the end portion 20 in registry with the aperture 30. A bolt 34 extends through the aperture 30 and the openings in the end portion 20 in registry with the aperture 30, as well as selected openings 32 in the walls 14 to retain the holder 16 and blade 28 in a selected vertically inclined position. The bolt 34 is provided with a complemental nut to retain the same in position to the holder, blade and walls 14.

Suitably fixed to the upper wall 36 of a mine car 38, is a pair of spaced parallel angle iron members 40 that slidably receive the side edges of the plate 12. The plate 12 is held fixed to the angle iron members 40 by any suitable number of screws 42 that are threaded to the angle iron members and which are receivably engaged in threaded openings in the plate 12 and, if desired for additional strength, openings in the wall 36.

In practical use of the present invention, the base member 10 is mounted on the car 38 and the blade 28 is disposed over a further car 44 that is coupled to the car 38. The car 38 is provided with a suitable motor for moving or pushing the cars 38 and 44 forwardly, the car 38 trailing the car 44.

As the cars move, the blade 28 will scrape or scale the bone or material 46 from the roof of a mine or tunnel, and the material 46 will fall into the car 44.

By adjusting the angular position of the holder 16 and blade 28, a predetermined amount of the material 46 can be removed from the mine roof.

In view of the foregoing description taken in conjunction with the accompanying drawings it

is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A mine roof scaler comprising a base member including a pair of upstanding walls, a tubular holder pivoted at one end between the walls, said holder having a transverse opening in its opposite end, said walls having a plurality of openings therein for selectively registering with the opening in said holder, a holding bolt received in the opening in said holder and selected openings in said walls for retaining the holder in a selected pivoted position, and a blade having an end retained in said holder by said holding bolt.

2. In a vehicle for mines including first and second cars coupled together; the improvement of which comprises a base mounted on the second car and including a pair of spaced walls, a tubular holder pivoted at one end between said walls, a blade carried by said holder and disposed over the first car for scaling a mine roof and permitting the scaled material to fall into the first car as the cars are moved with the first car leading the second car, and means for retaining the holder in a selected pivoted position.

ANTHONY SHACIKOSKI.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,116,359	Morgan	Nov. 3, 1914
1,127,395	Bemies et al.	Feb. 9, 1915
1,585,041	MacEachen	May 18, 1926